

Work Order ID 140002

December 16, 2015 11:57:53 AM

140002

Page 1

To ship April 5/16.

Item ID: D212-725-1-007

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Collective Bell Crank

Stop

NS2

Start Date: 12/16/2015 Start Qty: 6.00

6

Cust Item ID:

Required Date: 3/1/2016 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: SW. Date: 20151216

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D4215

A

100

0.01

100

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.08

HAAS CNC vertical machine #1

****Critical Part,MRB decisions on this part may only be performed by DART DE#02.Any changes to the design,manufacturing process,approved operating enviroment,and design loading spectrum will require a review of the fatigue evaluation for this part*****

Machine as per Folio FA656 and Dwg D212-725-1

Dwg Rev: A

Folio Rev: AA

DAS
08
9-89

110

0.00

110

QC

Quality Control

Memo

0.00

QC2

QC- Inspection performed by CMM

DAS
08
9-89

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Item ID: D212-725-1-007 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Collective Bell Crank
 Start Date: 12/16/2015 Start Qty: 6.00 *6* Cust Item ID:
 Required Date: 3/1/2016 Req'd Qty: 6.00 *6* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* Mill Conv Conventional Milling Machine	CONVENTIONAL MILLING MACHINE Memo MILL SLOTS AS PER DWG D212-725-1. using DT8895. 2-Deburr & Tumble	0.00 0.14		B.a 16/02/24		6	0		DAS 08 9-89
130 *130* QC Quality Control	QC2 QC1- Inspection performed by CMM Memo	0.00 0.00		B.a 16/02/24		6	0		DAS 08 9-89
140 *140* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00				6	0		DAS 44 9-89 16/03/02

Page 3

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
145		0.00							DAS 13 9-89
145									
Outsource2	Memo	12.00							
Outsource process - NDT	OUTSIDE SERVICES MACH Issue P/O: <u>31561</u> LPI Per ASTM 1417 LEVEL 2 Certificate of conformity is required								
150	Chemical Conversion Coat per QSI005 4.1	0.00							
150									
HandFinish	Memo	0.00							
Hand Finishing									
160	QC3- Inspect Part Finish	0.00							
160									
QC	Memo	0.00							
Quality Control									DAS 38 9-89 MAR 15 2016

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Item ID: D212-725-1-007

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Collective Bell Crank

Start Date: 12/16/2015 Start Qty: 6.00

6

Cust Item ID:

Required Date: 3/1/2016 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

170

Identify as per dwg & Stock Location

CA

0.00

170

Packaging

Memo

0.00

DAS
30
9-896

MAR 15 2016

Packaging

180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Memo

0.01

MCS

MAR 15 2016

Quality Control

MCS

MAR 15 2016

Picklist Print

December 16, 2015 11:57:58 AM

Page 1

Work Order ID: 140002

140002

Parent Item: D212-725-1-007

D212-725-1-007

Parent Item Name: Collective Bell Crank

Start Date: 12/16/2015

Required Date: 3/1/2016

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:A New Issue 07-014-10 JLM IPP Rev:B as
per ECN10-532 DD 10.04.08 verified by:JLM Ipp Rev:C Added
"Critical Part" Note 10-06-02 Verified By:DD ****Critical Part,MRB
decisions on this part may only be performed by DART DE#02.Any changes to
the design,manufacturing process,approved operating enviroment,and design
loading spectrum will require a review of the fatigue evaluation for this
part*****

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-007 D6101-005 *D6101-007* Saddle Billet		10/02/23 Manufactured	No				Each	86.0000	**	6		16/02/23	

Location	Loc Qty	Loc Code
MAT041	56	
136766	38	
138056	18	
MAT043	30	
135939	30	

D6101-005

—————> M140767

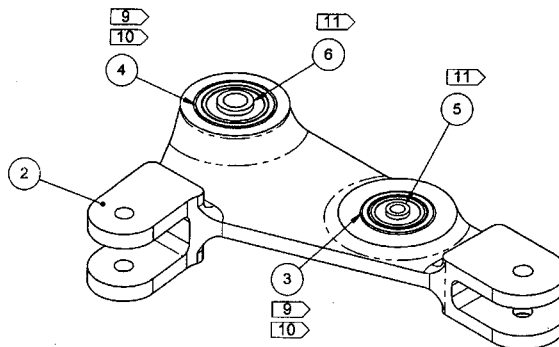
D6101-007

————— M136766

5.0

1.0

ITEM	QTY	PART NUMBER	DESCRIPTION
1	X	D212-725-1-901	COLLECTIVE BELLCRANK ASS'Y
2	1	D212-725-1-007	COLLECTIVE BELLCRANK
3	1	120-013-3A	SLEEVE
4	1	120-015-5A	SLEEVE
5	1	MS27643-3	BEARING
6	1	MS27647-5	BEARING



D212-725-1-901 COLLECTIVE BELLCRANK ASSY

CRITICAL PART

MRS DECISIONS ON THIS PART MAY ONLY BE PERFORMED BY DART DE#02. ANY CHANGES TO THE DESIGN, MANUFACTURING PROCESS, APPROVED OPERATING ENVIRONMENT, AND DESIGN LOADING SPECTRUM WILL REQUIRE A REVIEW OF THE FATIGUE EVALUATION FOR THIS PART.

NOTES:

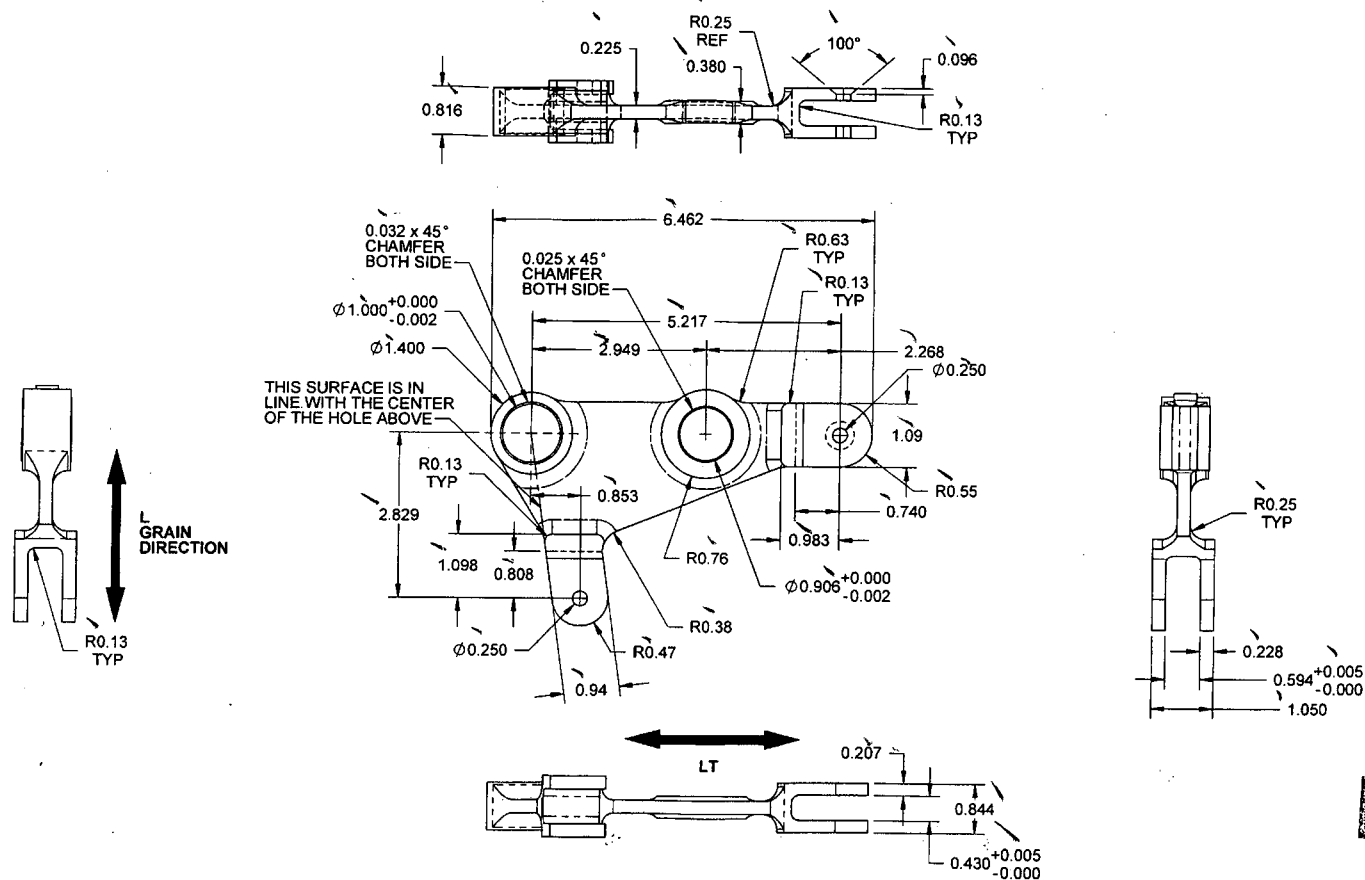
- 1) MATERIAL: N/A
- 2) FINISH: PRIME YELLOW PER DART QSI 005 4.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.68 lbs
- 8) SWAGE/STAKE PER QSI 002
- 9) SLEEVE ID AND OD MAY BE ADJUSTED TO PROVIDE PROPER FIT
- 10) SLEEVE SHOULD FIT INTO BELLCRANK USING FINGER PRESSURE ONLY
- 11) BEARING SHOULD FIT INTO SLEEVE USING FINGER PRESSURE ONLY

RELEASED
2011-08-25

20151215 SH 130002

A	NEW ISSUE	RF	11.02.24
REV.	DESCRIPTION	BY	DATE
DESIGN	DC		
DRAWN	RF		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	11.02.24		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D4215	REV. A
TITLE COLLECTIVE BELLCRANK	SCALE NTS
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RELEASED
2011-08-25
JND

NOTES:

- 1) MATERIAL: 7075-T7351 ALUMINUM
PER QQ-A-250/12
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.39 lbs
- 8) LPI PER ASTM 1417 LEVEL 2
- 9) SURFACE FINISH TO BE NO GREATER THAN 80 MICRINCH

D212-725-1-007 COLLECTIVE BELLCRANK

CRITICAL PART

MRB DECISIONS ON THIS PART MAY ONLY BE PERFORMED BY DART DE#02. ANY CHANGES TO THE DESIGN, MANUFACTURING PROCESS, APPROVED OPERATING ENVIRONMENT, AND DESIGN LOADING SPECTRUM WILL REQUIRE A REVIEW OF THE FATIGUE EVALUATION FOR THIS PART.

DESIGN	DC	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D4215	SHEET 2 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	COLLECTIVE BELLCRANK	NTS
DATE	11.02.24	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DART AEROSPACE LTD		Work Order: 140002
Description: Collective Bell Crank		Part Number: D212-725-1-007
Inspection Dwg: D4215	Rev: A	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

MRB decisions on this part may only be performed by Dart DE #02. Any changes to the design, manufacturing process, approved operating environment and design loading spectrum will require a review of the fatigue evaluation for this part.

				Record Actual Dimensions				
Dim	Min	Max		16	2	3	4	5
HAAS Section								
A	0.806	0.826		0.819				
B	0.215	0.235		0.227				
C	0.370	0.390		0.383				
D	0.220	0.280		0.250				
E	99.5	100.5		100°				
F	0.086	0.106		0.098				
G	6.452	1.472		6.462				
H	0.022	0.042	1 st Side	0.031				
H	0.022	0.042	2 nd Side	0.031				
I	0.998	1.000		0.9993				
J	1.390	1.410		1.400				
K	2.944	2.654		2.949				
L	2.258	2.278		2.268				
M	0.249	0.255		0.252				
N	0.973	0.993		0.984				
O	0.904	0.906		0.9052				
P	0.249	0.255		0.252				
Q	0.015	0.035	1 st Side	0.022				
Q	0.015	0.035	2 nd Side	0.022				
R	0.834	0.844		0.843				
S	1.040	1.060		1.0505				
T	0.220	0.280		0.250				

Measured by: B.A.	Date: 16/02/24
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Manual Milling Section								
AA	0.218	0.238		0.227				
AB	0.594	0.599		0.595				
AC	0.430	0.435		0.430				
AD	0.197	0.217		0.205				
AE	0.798	0.818		0.808				
AF	0.730	0.750		0.741				
AG	0.100	0.160		0.125				
Accept/Reject								

Measured by: B.A. DAS	Date: 16/02/24
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Audited by: F.K. 44	Date: 16/03/24
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Preliminary Approval:	Date:
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Rev	Date	Change	Revised by	Approved
A	07.01.17	New Issue	KJ/JLM	
B	08.12.02	Dimensions updated per Dwg Rev. D	KJ/DD	
C	10.02.02	Dimensions updated	KJ	
D	10.06.02	Dwg Rev updated	KJ	
E	13.08.23	Dwg D212-725-1 superceded by D4215	KJ	

DART AEROSPACE LTD		Work Order: 140002
Description: Collective Bell Crank		Part Number: D212-725-1-007
Inspection Dwg: D4215	Rev: A	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

MRB decisions on this part may only be performed by Dart DE #02. Any changes to the design, manufacturing process, approved operating environment and design loading spectrum will require a review of the fatigue evaluation for this part.

				Record Actual Dimensions				
Dim	Min	Max		1	2	3	4	5
HAAS Section								
A	0.806	0.826		0.819	0.819	0.819	0.819	0.819
B	0.215	0.235		0.227	0.227	0.227	0.227	0.227
C	0.370	0.390		0.383	0.383	0.383	0.383	0.383
D	0.220	0.280		0.250	0.250	0.250	0.250	0.250
E	99.5	100.5		100°	100°	100°	100°	100°
F	0.086	0.106		0.098	0.098	0.098	0.098	0.098
G	6.452	1.472		6.466	6.462	6.462	6.462	6.462
H	0.022	0.042	1 st Side	0.031	0.031	0.031	0.031	0.031
H	0.022	0.042	2 nd Side	0.031	0.031	0.031	0.031	0.031
I	0.998	1.000		0.9994	0.9994	0.9993	0.9994	0.9994
J	1.390	1.410		1.400	1.400	1.400	1.400	1.400
K	2.944	2.654		2.949	2.949	2.949	2.949	2.949
L	2.258	2.278		2.269	2.268	2.268	2.269	2.268
M	0.249	0.255		0.252	0.252	0.252	0.252	0.252
N	0.973	0.993		0.984	0.984	0.984	0.984	0.984
O	0.904	0.906		0.9050	0.9052	0.9052	0.9050	0.9053
P	0.249	0.255		0.252	0.252	0.252	0.252	0.252
Q	0.015	0.035	1 st Side	0.022	0.022	0.022	0.022	0.022
Q	0.015	0.035	2 nd Side	0.022	0.022	0.022	0.022	0.022
R	0.834	0.844		0.844	0.844	0.844	0.845	0.845
S	1.040	1.060		1.049	1.051	1.050	1.051	1.051
T	0.220	0.280		0.250	0.250	0.250	0.250	0.250

Measured by: H. a

Date: 16/02/23

Manual Milling Section

AA	0.218	0.238		0.227	0.225	0.227	0.227	0.227
AB	0.594	0.599		0.595	0.596	0.595	0.595	0.595
AC	0.430	0.435		0.430	0.430	0.430	0.430	0.430
AD	0.197	0.217		0.205	0.203	0.205	0.205	0.205
AE	0.798	0.818		0.809	0.812	0.807	0.807	0.808
AF	0.730	0.750		0.743	0.748	0.741	0.740	0.741
AG	0.100	0.160		R0.125	R0.125	R0.125	R0.125	R0.125

Accept/Reject DAS

Measured by: H. a DAS 08

Date: 16/02/24

Audited by: FK 44

Date: 16/03/02

Preliminary Approval:

Date:

Rev	Date	Change	Revised by	Approved
A	07.01.17	New Issue	KJ/JLM	
B	08.12.02	Dimensions updated per Dwg Rev. D	KJ/DD	
C	10.02.02	Dimensions updated	KJ	
D	10.06.02	Dwg Rev updated	KJ	
E	13.08.23	Dwg D212-725-1 superceded by D4215	KJ	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

OUTSTANDING PO REPRINT

Purchase Order ID PO31561

Purchase Order Date 3/2/2016

PO Print Date 3/10/2016

Page Number 1 of 1

Order From : VC-SKY001
SKYSERVICE
6120 MIDFIELD ROAD
MISSISSAUGA, ONTARIO L5P 1B1
CANADA

Ship To : DART AEROSPACE LTD
1270
ABERD
EEN
HAWKE
SBURY,
ON
K6A
1K7
CANAD
A

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905-678-5636	Customer POID	
Vendor Fax	905-678-5841	Customer Tax #	10127-2607
Ship To Contact		Terms	Net 30
Ship To Phone		Currency	CAD
		FOB	FCA - (Free Carrier)
Ship Method	Delivered		
Ship Acct			

Line Nbr	Item ID Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable	Req Qty	Extended Price
10	140002	D212-725-1-007 COLLECTIVE BELL CRANK	3/10/2016 Yes	6.00	\$0.00
			3/10/2016		
		LIQUID PENETRANT INSPECTION AS PER QSI 038 OR LPI AS PER ASTM 1417 LEVEL 2			

SP/6-03-10

Line Total: \$0.00

Outstanding PO Total: \$0.00

Change Nbr: 4

Change Date: 3/10/2016

Terms & Condition of
Purchasing(Suppliers) and
Procurement Quality Clauses are an
integral part of our AS9100

Work Order Traveler

Sky Service F.B.O. Inc.

DOT APP 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO27555	Customer: Dart Aerospace Ltd.	Dept: NDT YUL	Reference: 31561
Descr:	PN:	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN:	CSN:	TSO:	

Sequence: 1

Work Required:

CARRY OUT NDT ON SIX COLLECTIVE BELL CRANKS AS PER PO : 31561

SIX COLLECTIVE BELL CRANK , ITEM ID# (D212-725-1-007) W/O ID# (140002 .

Action Taken:	Date:	Initial/Stamp:
LIQUID PENETRANT INSPECTION CARRIED OUT AS PER ASTM E-1417M-13 NO CRACK FOUND PEN.(ZL-37 , B#MPO13139), DEV.(SKD-S2,B#MPO11715) , EMU.(ZR-10B,B#MPO12376). DAS 38 9-88 MAR 10 2016	MAR 07 2016	DOY-APP 37 53-89

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature:	DOT-APP 37 53 - 89	ACA/SCA Stamp	Date:
Name:		LUCA MARCHETTA	